



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,384	11/25/2003	Kern L. Cooper	650070.407	4621

500 7590 12/04/2007
SEED INTELLECTUAL PROPERTY LAW GROUP PLLC
701 FIFTH AVE
SUITE 5400
SEATTLE, WA 98104

EXAMINER

LEFF, STEVEN N

ART UNIT	PAPER NUMBER
----------	--------------

1794

MAIL DATE	DELIVERY MODE
-----------	---------------

12/04/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/722,384

Applicant(s)

COOPER ET AL.

Examiner

Steven Leff

Art Unit

1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) 34 and 35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 and 36-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 5/27/04
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

- Claims 7, 13, and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
 - Claim 7 is rejected due to the phrase “between mashing in step (b)” as it lacks antecedent basis and thus it is unclear if the “mashing” is considered the same as the comminuting step of claim 1, or if “mashing” is a separate distinct step.
 - Claim 7 is further rejected due to the phrase “is not cooled more than about 30C” as it is unclear if the phrase is with respect to the vegetable maintaining a temperature of at least 30C, or if the phrase is with respect to the maximum temperature change of less than 30C, of the vegetable between the two stages.
 - Claim 13 is rejected due to the phrase “mashed vegetable” on lines 1 and 3, as it lacks antecedent basis and thus it is unclear if the “mashing” is considered the same as the comminuted vegetable of claim 1, or if “mashing” is a separate distinct vegetable.
 - With respect to claim 21, the phrase “the uncomminuted packaged vegetable is not cooled more than about 30°C between packaging in step (a) and sterilizing in step (b)” is rejected as it is unclear if the phrase is with respect to the vegetable maintaining a temperature of at least 30C, or if the phrase is with respect to the maximum temperature change of less than 30C, of the vegetable between the two stages.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- Claims 15-26, 28, and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Meyer (6017572).

With respect to claims 15-26, 28, and 32 Meyer teaches a method for making a shelf-stable product comprising a partially cooked uncomminuted vegetable, said method comprising the steps of (a) packaging an uncomminuted partially cooked vegetable (col. 6 line 51+) at a temperature in excess of about 60°C (col. 4 line 65+) in a sealed container (col. 6 line 42+), (b) sterilizing said packaged partially cooked uncomminuted vegetable by pressurizing comprising subjecting said packaged uncomminuted vegetable in at least one stage (col. 5 line 1+) to a first pressure of at least 50,000 psi (col. 5 line 3+) at a first temperature above ambient temperature to heat the uncomminuted vegetable to a temperature in excess of about 90°C (col. 45 line 5+, col. 4 line 65+) to render it shelf-stable (col. 4 line 62+), and (c) releasing the pressure (col. 5 line 23+).

Meyer continues by teaching that the sterilized uncomminuted vegetable after step (c) when reheated and served has a flavor substantially the same as said partially cooked vegetable of step (a) (col. 3 line 20+), that the uncomminuted vegetable is heated to the packaging temperature in less than about 65 minutes (col. 7 line 47) that the packaged uncomminuted vegetable at a temperature in excess of 60°C is placed in a chamber (col. 7 line 55+) for pressurizing in step (b), that the packaged vegetable is pressurized within about 15 minutes of packaging (col. 7 line 47), and that the uncomminuted packaged vegetable is not cooled more than about 30°C between packaging in step (a) and sterilizing in step (b), where it is noted that Meyer specifically teaches pre-heating to the pre-heat temperature for five minutes where the pressurization must take place immediately there after in order for the pre-heated food product to remain at the desired and specific pre-heated temperature which is taught by Meyer (col. 45 line 5+, col. 4 line 65+) and is greater than about 70°C (col. 45 line 5+, col. 4 line 65+).

Meyer further teaches that the vegetable is selected from the group consisting of: potatoes, beans, avocados, broccoli, squash, peas, carrots, radishes, rutabaga, asparagus, beets, string beans, other legumes, grains such as corn, wheat and rice, sweet potatoes, yams, cauliflower, cabbage, kohlrabi, okra, spinach, garlic, onions, peppers, tomatoes, parsley, parsnips, turnips, cucumbers, plant sprouts, celery, bok choy, collards,

Art Unit: 1794

Brussels sprouts, egg plants, squash, pumpkins, fennel, kale, pomegranate, leeks, lettuce, mushrooms, olives, rhubarb, chives, and coconuts (col. 6 line 51+) and specifically potatoes (col. 6 line 52).

In addition, Meyer teaches that the pressurizing further comprises the steps of releasing said first pressure (col. 5 line 12+) and subjecting said packaged vegetable in a second stage to a second pressure in excess of 30,000 psi at a second temperature above ambient temperature (col. 5 line 18+), said second stage occurring either before or after said first stage, and wherein pressure is released between said first and second stages (col. 5 line 12+). Further, the vegetable is subject to a temperature in excess of 70°C for less than about 60 minutes prior to pressurizing (col. 5 line 1+).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- Claims 1-14, 33, and 36-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer (6017572) in view of Hawk et al. (2912330).

Meyer is taken as above and further teaches with respect to claims 1-14, a method for making a shelf-stable product comprising a comminuted vegetable, said method comprising the steps of (a) at least partially cooking a vegetable having a pH of at least 4.5 (col. 6 line 52+), (b) packaging the comminuted vegetable of step (b) in a sealed container (col. 6 line 42+), (c) sterilizing said packaged vegetable by pressurizing

comprising subjecting said packaged comminuted vegetable in at least one stage to a first pressure of at least about 50,000 psi (col. 3 line 50+) at a first temperature above ambient temperature to heat the comminuted vegetable to a temperature in excess of about 90°C (col. 3 line 46+, col. 5 line 5+, col. 4 line 65+) to render it shelf-stable (col. 4 line 62+), and wherein said vegetable is not subjected to an elevated temperature for a time greater than about 120 minutes (col. 5 line 1+) and prior to sterilization in step (e), and (f) releasing said pressure (col. 5 line 23+). With respect to claims 6 and 13, Meyer is taken where the first pressurization step is the pre-cooking step (col. 5 line 2+), and that the release of pressure after the first pressurization causes the cooling of claims 6 and 13, as it taught by Meyer (col. 5 line 15+), and that the heating step (h) is for less than about 15 minutes (col. 5 line 1+).

Meyer continues by teaching that the sterilized vegetable of step (f) when reheated and served has a flavor substantially the same as the comminuted vegetable in step (b) (col. 3 line 20+), that the vegetable is not subjected to the elevated temperature for a time greater than about 25 minutes (col. 5 line 1+, col. 5 line 27+), or that the vegetable is not subjected to the elevated temperature for a time greater than about 15 minutes (col. 5 line 1+, col. 5 line 27+). Further, Meyer teaches that the elevated temperature is at least about 75°C (col. 4 line 65+), and that the vegetable is not cooled more than about 30°C between mashing in step (b) and sterilizing in step (e) (col. 5 line 8+) or that the first temperature is greater than about 60°C (col. 7 line 32+).

The pressurizing further comprises the steps of releasing the first pressure (col. 5 line 12+) and subjecting the packaged vegetable in a second stage to a second pressure in excess of 30,000 psi (col. 5 line 20+) at a second temperature above ambient temperature (col. 5 line 5+), said second stage occurring either before or after said first stage (col. 5 line 18+), and wherein pressure is released between said first and second stages (col. 5 line 12+).

However with respect to claims 1-14 Meyer is silent with respect to comminuting the vegetable material prior to treating.

Hawk et al. teach a method for treating vegetables (abstract). More specifically Hawk et al. teach feeding the raw washed vegetables into a "hopper and are forced into the comminution chamber to be comminuted and cooked or partially cooked therein" (col. 3 line 35+).

Therefore although Meyer does not teach comminuting the vegetable, one of ordinary skill in the art would have been motivated to combine the teaching of Meyer and Hawk et al. and teach comminuting the vegetable material prior to treating since Meyer does teach that the use of pre-cut foods (col. 7 line 36+) as the macaroni has been reduced in size, for its art recognized and applicant's intended purpose of providing specifically shaped and sized food products which are commercially sterile but the flavor, texture or color are not affected by the treatment process (col. 5 line 29+), and since Hawk et al. teach feeding the raw washed vegetables into a "hopper and are forced into the comminution chamber to be comminuted and cooked or partially cooked therein" (col. 3 line 35+) thereby providing a comminuted vegetable as opposed to a whole vegetable to be treated.

Thus it would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to have taught the additional step of comminuting the vegetable material prior to treating since Meyer teaches cut, treated materials, and since Hawk et al. teach the known advantage of comminuting potatoes (col. 3 line 59) in addition to teaching that the "after discharge, the products may be subjected to further treatment (col. 2 line 60+) such as that of Meyer. It would have been further obvious to comminute the food material prior to treatment since MPEP 2144.07 states that the selection of a known process based on its suitability for its intended use supports a prima facie obviousness determination, which in this case the process is comminuting a vegetable prior to treatment.

With respect to claims 33, and 36-42 although Meyer does not teach the specific degree of pre-cooking, and thus the degree of gelatinization of the pre-cooked potato product, Meyer does teach pre-heating the vegetable product for a defined time frame of less than a second to 200 minutes (col. 5 line 1+) where the degree of gelatinization of the potato (col. 6 line 52) would be a function of the duration of time the product is within the heated environment, the intensity of heating, and the size of the food itself as well as other result-effective variables (col. 4 line 64+), and where Hawk et al. specifically teach cooking or partially cooking the vegetable product during comminuting (col. 3 line 37) with respect to potatoes and the rate-effective variables which are required to be defined in order to provide a specific degree of gelatinization (col. 3 line 57+).

Therefore one of ordinary skill in the art would have been motivated to combine the teachings of Meyer and Hawk et al. and taught a specific gelatinization level prior to treatment since an increase in either the rate of heating, an increase in intensity of heating, or an increase in the food product size or any other variable would have been recognized by an ordinarily skilled artisan as rate dependant variables which would directly affect the intensity of heating and the duration of time which is required to produce a specifically cooked food product to a specific final pre-cooking state, and/or doneness, and since all the claimed elements were known in the prior art and one skilled in the art could have substituted the elements with no change in their respective functions, thus yielding predictable results to one of ordinary skill in the art at the time of the invention.

Further, since the heating intensity and time needed to treat the food product are dependent upon one another, and since the intensity and time needed to treat the food product can also be a function of the amount of food product that is to be treated, it would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to teach specific gelatinization levels, since the only difference between the prior art and the claims was a recitation of relative gelatinization levels, where the claimed method would not be expected to perform differently than the prior art method, and thus the claimed method is not patentably distinct from the prior art method (See MPEP 2144.04 W A) since Hawk et al. specifically teach a cooked or partially cooked vegetable product, since Meyer teaches a defined pre-cooking time and since "where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation," (see MPEP 2144.04 IIA), as the normal desire of scientists or artisans to improve upon what is already generally known provides the motivation to determine where in a disclosed set of percentage ranges is the optimum combination of percentages" (see MPEP 2144.04 IIA).

- Claims 27, and 29-31 is rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer (6017572) in view of Hannah et al. (5393544).

Meyer is taken as above however Meyer is silent with respect to the potato being at least partially peeling the potato prior to packaging, or cut, or fried, or cooked or grilled or baked after releasing the pressure.

Hannah et al. teach preparing French fry style potatoes. More specifically Hannah et al. teach the potato being at least partially peeled prior to packaging (col. 5 line 64+), or cut (col. 6 line 2), or fried (col. 7 line 7+), or cooked (col. 7 line 1+) or grilled or baked (col. 7 line 33+) after it has been specifically treated (col. 6 line 21).

Therefore although Meyer does not teach the potato being at least partially peeled, or cut, or fried, or cooked or grilled or baked after it has been specifically treated, one of ordinary skill in the art would have been motivated to combine the teaching of Meyer and Hannah et al. and teach the potato being at least partially peeled prior to packaging cut, or fried, or cooked or grilled or baked after it has been specifically treated, since Meyer does teach that the use of pre-cut foods (col. 7 line 36+) for its art recognized and applicant's intended purpose of providing specifically shaped and sized food products which are commercially sterile but the flavor, texture or color are not affected by the treatment process (col. 5 line 29+), and since Hannah et al. teach that the potato is at least partially peeled (col. 5 line 64+), or cut (col. 6 line 19+), or fried (col. 7 line 7+), or cooked (col. 7 line 33+) or grilled or baked (col. 7 line 34+) after it has been specifically treated thereby providing a cut, or fried, or cooked or grilled or baked potato product after it has been specifically treated, thus providing a specifically treated and cooked potato product.

Thus it would have been obvious to one of ordinary skill in the art at the time of the invention by the applicant to have taught the potato being cut, or fried, or cooked or grilled or baked after it has been specifically treated since Meyer teaches cut, treated, cooked potatoes, and since Hannah et al. teach the potato is at least partially peeled (col. 5 line 64+), or cut (col. 6 line 19+), or fried (col. 7 line 7+), or cooked (col. 7 line 33+) or grilled or baked (col. 7 line 34+), thus providing a specifically treated and cooked potato product which is produced by the consumer with regard to a specifically looking, and tasting product. It would have been further obvious to cut, or fried, or cooked or grilled or baked potato product since MPEP 2144.07 states that the selection of a known process based on its suitability for its intended use supports a prima facie obviousness determination, which in this case the process is cutting, or frying, or cooking or grilling or baking the potato product prior to treatment.

Art Unit: 1794

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven Leff whose telephone number is (571) 272-6527. The examiner can normally be reached on Mon-Fri 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Callie Shosho can be reached at (571) 272-1123. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

5874
11/28/07


DREW BECKER
PRIMARY EXAMINER
11/29/07

SL